



# SABIC® PMMA 20HR

## POLYMETHYL METHACRYLATE

### DESCRIPTION

SABIC® PMMA 20HR is a General purpose grade suitable for injection molded housewares, automotive tail lights, optical lens as well as for extrusion sheets, pipes, and rods. This grade is listed in "AMECA" list for three years.

### TYPICAL PROPERTY VALUES

Revision 20240424

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES <sup>(1)</sup>			
Specific Gravity	1.19	g/cm <sup>3</sup>	ISO 1183
Melt Flow Rate, 230°C/3.8 kg	2.0	g/10 min	ISO 1133
Water Absorption (24hr)	0.3	%	ISO 62
MECHANICAL PROPERTIES <sup>(1)</sup>			
Tensile Strength	77	MPa	ISO 527
Elongation	6	%	ISO 527
Modulus Of elasticity (1 mm/min)	3.3	GPa	ISO 527
Flexural Strength	140	MPa	ISO 178
Flexural modulus (2 mm/min)	3.3	GPa	ISO 178
Charpy Impact strength (un notched)	20	kJ/m <sup>2</sup>	ISO 179
Charpy Impact strength (Notched) 23°C	1.4	kJ/m <sup>2</sup>	ISO 179
Rockwell Hardness (M-scale)	101	-	ISO 2039
OPTICAL PROPERTIES <sup>(1)</sup>			
Total Light Transmittance	93	%	ISO 13468
Haze	0.3	%	ISO 14782
Refractive Index	1.49	-	ISO 489
THERMAL PROPERTIES <sup>(1)</sup>			
Coefficient of Linear Expansion (-30°C to 30°C)	6e-5	1/°C	ASTM D696
Thermal Conductivity	0.2	W/(m*°C)	ASTM C177
Deflection temperature under load DTUL (@1.8 MPa)	100	°C	ISO 75-1&2
Vicat Softening Temperature (B50)	107	°C	ISO 306

(1) Typical values; not to be construed as specification limits

### CHARACTERISTICS

SABIC® PMMA 20HR has the following:

- Good chemical resistance
- Good impact resistance
- Good toughness
- High gloss

### STORAGE AND HANDLING

Handle in an area equipped with local or general ventilation. Provide facilities for washing eyes and body in case of emergency near the handling area. As preventive measure, make sure all equipment and devices are properly grounded. Store at a location away from heat and fire source and an area not exposed to sunlight. Store in an area where no water leakage occurs and the humidity is low.

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CHEMISTRY THAT MATTERS™



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